### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-016810 Address: 333 Burma Road **Date Inspected:** 16-Sep-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1530 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job Site

**CWI Name:** Listed below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Weld Procedures Followed: Electrode to specification:** Yes No Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No **Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** S.A.S. components

## **Summary of Items Observed:**

The Quality Assurance Inspector (QAI), Scott Croff, was present at the Self Anchored Span (SAS) job site to observe the scheduled fabrication and welding of components for the SFOBB project. The following observations were made:

- 1) OBG field splice welding at 6E/7E-F
- 2) OBG field splice welding at 6E/7E-B
- 2) OBG field splice welding at 5W/6W-C
- 3) Contract document review at Pier 7
- 1) The QAI observed ABF personnel welding plate F at OBG lifts 6E/7E field splice. The QAI noted that the Quality Control (QC) Inspector Tom Pasqualone is monitoring this welding. The QAI observed ABF worker Xiao Jian Wan, ID 9677, making the vertical (3G) complete joint penetration (CJP) weld with shielded metal arc welding (SMAW) with E7018-H4R electrodes. The QAI was informed that welding procedure specification ABF-WPS-D15-1040B is being used for this welding. The QAI randomly measured the preheat, interpass temperature and welding parameters and noted that they appeared to be conforming to the WPS requirements. See the attached photo.
- 2) The QAI observed ABF personnel welding plate B at OBG lifts 6E/7E field splice. The QAI noted that the QC Inspector Tom Pasqualone is monitoring this welding. The QAI observed ABF worker James Zhen, ID 6001, making the 3G CJP weld with SMAW using E7018-H4R electrodes. The QAI was informed that welding procedure specification ABF-WPS-D15-1040B is being used for this welding. The QAI randomly measured the

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preheat, interpass temperature and welding parameters and noted that they appeared to be conforming to the WPS requirements.

- 3) The QAI observed ABF personnel back welding plate C at OBG lifts 5W/6W field splice. The QAI noted that the overhead position (4G) CJP weld segments C1 and C2 are being completed after the backing bar has been removed. The QAI noted that the QC Inspector Jim Cunningham is monitoring this welding. The QAI observed ABF workers Jeremy Dolman, ID 5042 and Rory Hogan, ID 3186, making the welds with gas shielded flux cored arc welding (FCAW-G). The QAI was informed that ABF-WPS-D15-3040A-1 is being used for this welding. The QAI randomly measured the preheat, interpass temperature and welding parameters and noted that they appeared to be conforming to the WPS requirements. See the attached photo.
- 4) The QAI reviewed contract related documents including the submitted and approved Welding Quality Control Plan (WQCP) and approved revisions to the WQCP. The QAI was given the contractors submittals 1536 Rev. 22 thru Rev. 26 to review. The OAI noted that these submittals contain previously rejected submittals and will be used to correct the applicable submittal. The QAI continued consolidating the information from previous welding report submittals to identify missing reports of inspections. The QAI continued generating a weld specific tracking list from the contractor's welding reports.





#### **Summary of Conversations:**

The QAI had general conversations with ABF and Caltrans personnel during this shift. The QAI relayed the observations of welding and the status of submittal reviews to the QAI Lead Bill Levell. Except as described above, there were no other notable conversations or observations.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi, (916) 813-3677, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Croff,Scott	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer